

Historic, Archive Document

Do not assume content reflects current
scientific knowledge, policies, or practices.



A. A. Greenwood

SUGAR REPORTS

U.S. DEPARTMENT OF AGRICULTURE - COMMODITY STABILIZATION SERVICE
SUGAR DIVISION

WASHINGTON, D. C.

JULY 1956

NO. 51

CONTENTS

	<u>PAGES</u>
1. MARKET REVIEW	2-4
2. PROPOSED TESTIMONY FOR HEARING WITH RESPECT TO DEFINITIONS, REFINING PROCESSES, AND QUALITIES OF RAW AND DIRECT-CONSUMPTION SUGARS, JULY 30, 1956	5-17
3. ADMINISTRATIVE ACTIONS	17-18
4. STATISTICAL SERIES	19-28
(a) Highlights	19
(b) Receipts and meltings January-May 1956, deliveries by primary distributors June 1956 and January-June 1956 and 1955, and stocks at selected dates 1955 and 1956	20-23
(c) Status of quotas as of June 30 and July 13, 1956, com- parison of charges to quotas January-June 1956 and 1955.	24-26
(d) Deliveries by primary distributors by States, May 1956	27
(e) Sugar prices by areas, and sugar production and stocks	28

MARKET REVIEW

Sugar deliveries for domestic consumption during the first half of the year amounted to 4,149,000 short tons, 184,000 tons more than reported for the first half of 1955 and 229,000 tons more than for the first half of 1954. In both of the earlier years, reported deliveries were depressed somewhat as the result of constructive deliveries at the end of the immediately preceding years. After full recognition of this situation, actual deliveries in the first half of the year exceeded those in the corresponding periods of 1955 and 1954 by 117,000 and 101,000 tons, respectively.

Beet sugar deliveries for United States consumption of 798,000 tons during the first half of this year were 83,000 tons less than reported deliveries and 142,000 tons less than actual deliveries for the first half of 1955, 59,000 tons of sugar having been constructively delivered at the end of 1954. On the other hand, cane sugar deliveries for United States consumption of 3,351,000 tons during the first half of 1956 were 268,000 tons larger than deliveries during the first half of the preceding year.

Actual sugar deliveries during the first half of 1956 amounted to 49.6 pounds, raw value, per person and compare with 49.0 and 50.1 pounds during the corresponding periods of 1955 and 1954, respectively.

Quota charges amounted to 4,631,000 tons as of June 30, 1956, and were 482,000 tons in excess of deliveries. A year ago, the excess of quota charges over deliveries was unusually small and amounted to only 282,000 tons. Stocks held by primary distributors were 1,471,000 tons compared with 1,329,000 tons a year earlier. While beet processors' stocks were identical on June 30, 1956 and 1955, stocks of refiners and mainland sugarcane processors were about 170,000 tons in excess of a year ago.

The sugar market has been strong in recent weeks. The price of raw sugar, duty paid New York, stood at 6.14 cents per pound on July 20, its highest point since November 1954. After a temporary decline to 5.90 cents early in June, the price climbed gradually. It averaged 6.00 cents in June and 6.08 cents during the first half of July. The futures market displayed similar strength. Contracts for domestic delivery in September and November were recently traded at prices corresponding to the spot price.

The current world market situation is one of stable strength. The world market price averaged 3.36 cents per pound in May and

June, 3.38 cents during the first half of July, and stood at 3.41 cents on July 18 and 19, its highest level in 14 months and only 2 points less than the highest level attained during the life of the present International Sugar Agreement.

According to trade reports, major world market exporters have little if any sugar available for sale and shipment before August 31. Since there is often quite a lag between sale and exportation and a longer lag between exportation and the reporting of exportation, it is difficult to gain a clear up-to-date picture. The following tabulation is an attempt to bring together pertinent available information for the 3 major world market exporters, all participants in the International Sugar Agreement.

	<u>Cuba</u>	<u>Dominican Republic</u>	<u>China (Taiwan)</u>
	<u>1,000 Metric tons, raw value</u>		
ISA effective quotas	2,025	540	540
80 Percent of quotas			
exportable before 8/31	1,620	432	432
Latest reported exports	1,077 <u>1/</u>	288 <u>2/</u>	275 <u>3/</u>
Available, sold or unsold	543	144	157

1/ Through June 15. 2/ Through May 31. 3/ Through March 31.

According to a trade source, Cuba, as of June 30, had sold 1,919,000 metric tons of sugar for shipment in 1956 so that only about 100,000 tons of her effective world market quota remain uncommitted. Mexican sugar production during the season just closing amounted to only 745,000 metric tons compared with 902,000 tons last year. Having filled its quota in the United States market, the balance of available supplies probably will be required to meet domestic consumption.

As to world market suppliers not participating in the International Sugar Agreement, Brazil began her new sugar year on June 1 with minimum carryover stocks. End of April stocks were 193,000 metric tons, little more than an average month's consumption. Brazilian domestic consumption in May is typically in excess of production. Thus, carryover stocks on June 1 were apparently less than one month's consumption requirements.

Peru, on the other hand, reports the availability of at least as much sugar for export to the free market in 1956 as was exported in 1955, namely, 431,000 metric tons. Venezuela has sold at

least 18,000 metric tons for export out of a surplus estimated from 40,000 to 70,000 tons. This means that an unexpected supplier has entered the world market while, on the other hand, the world market requirements have been slightly reduced by the exportation to the Federal Republic of Germany of 26,000 metric tons of French and Belgian sugars under the preferential provisions of Article 15 of the International Sugar Agreement. That Article authorizes France, the Federal Republic of Germany, and the Benelux countries to trade up to 175,000 metric tons of sugar among themselves without any charge to International Sugar Agreement quotas. Before the announcement of these sales, it was hoped that Germany would meet her requirements from ISA quotas.

PROPOSED TESTIMONY FOR HEARING ON PROCESSING
OF SUGARS WHICH CONSTITUTE FURTHER REFINEMENT
OR IMPROVEMENT IN QUALITY, AND DISTINCTION OF
SUGARS OF SPECIFIC QUALITIES AS RAW SUGAR OR
DIRECT-CONSUMPTION SUGAR, JULY 30, 1956.

By

Charles B. Broeg
Sugar Division, CSS

As announced in the notice of this hearing, the Secretary of Agriculture desires to receive evidence which will enable him to determine whether specific processes to which sugars are subjected are sufficient to fulfill the requirements of the definition of the term "to be further refined or improved in quality" as set forth in paragraph 101 (n) of the Act and whether sugars of specific qualities are raw sugar within the definition of the term "raw sugar" as set forth in paragraph 101 (d) of the Act, or direct-consumption sugar within the definition of "direct-consumption sugar" as set forth in paragraph 101 (e) of the Act.

It does not appear practical, necessary, nor in the public interest for the representative of the Department to present a proposal prior to the submission by interested persons of evidence relevant to the subjects and issues involved. The following information and data are submitted as a reference base for all interested persons.

Problem

In its simplest aspect, the major problem confronting the Secretary in administering section 101 (n) of the Sugar Act of 1948, as amended, is the establishment of satisfactory quality criteria for distinguishing raw sugar from direct-consumption sugar to supplement the criterion used in the definitions of such sugars. In its broader aspects, the problem requires a consideration of: (1) the specific processes and characteristics thereof which subject sugar substantially to the processes of affination or defecation, clarification, and further purification by adsorption or crystallization, (2) the distinction and characteristics of sugars of the specific qualities of raw sugar, (3) the distinction and characteristics of sugars of the specific qualities of direct-consumption sugar, (4) methods for the determination of the specific qualities of raw and direct-consumption sugars, (5) application of such

methods to specific lots of sugar, and (6) substantiation required for submission to the Department of Agriculture relating to specific processes to which sugars are to be subjected substantially and the specific qualities of sugars.

Background

The problem is not inherently a new one, but the concurrent circumstances place the problem in a new environment.

Prior to the Tariff Act of 1913, specific provision was made under a number of Tariff Acts for distinguishing raw sugar from refined sugar. However, beginning with the Tariff Act of 1913, refined sugar as such was not retained as an enumerated article in the sugar paragraph.

With the enactment of sugar quota legislation in 1934, the need to distinguish specifically raw sugar from direct-consumption sugar arose. Therefore, definitions for raw and direct-consumption sugars were included in the legislation. The circumstances under sugar quota legislation which made the distinction of raw from direct-consumption sugar necessary were quite different from those under which the tariff distinction was made. Consequently, the Sugar Acts established a criterion different from that used in the Tariff Acts to distinguish raw from direct-consumption sugar.

The criterion introduced by sugar quota legislation was a use criterion, i. e., sugar to be further refined or improved in quality was raw sugar and that not to be further refined or improved in quality was direct-consumption sugar. The criterion that had been used in earlier Tariff Acts was based on measurement of physical properties (indirectly qualities) of sugar, i. e., sugar of a given color and polarization was raw sugar and sugar exceeding those limitations was refined or direct-consumption sugar.

Although a use criterion has been and is used for Tariff Act classification of some articles (molasses, for example), its application to sugar under the Sugar Act was an innovation. As could be expected, the innovation introduced some uncertainty within the sugar industry as to its application under the quota system and questions stemming from that uncertainty immediately arose.

These questions were of three general types. The first type was with regard to the direct use of sugars of the general qualities of raw sugar, i. e., were sugars which were satisfactory for some uses without further processing (curing tobacco, etc.) to be

classified as raw or direct-consumption sugar under quotas? In view of the wording of the definitions, it was determined administratively that such sugars, even though customarily thought of as raw sugar in the trade, were to be classified for quota purposes as direct-consumption sugars.

The second type of question that was raised was a logical followup of the determination with respect to sugars of raw quality for direct use. Were sugars which were customarily used for direct-consumption, but which were further processed to improve their quality to some slight degree, to be classified as raw sugar? This question, of course, involved a more fundamental issue than did the question pertaining to the direct use of sugar of raw quality. Consequently, the administrative determination resulting from that question was based on an interpretation of the phrase "to be further refined or improved in quality," that was contained in the definitions for raw and direct-consumption sugars. It was determined that the removal of traces of impurities did not constitute further refining or improving in quality insofar as quota classification was concerned and that such sugars were to be classified as direct-consumption sugar.

The third general type of question pertained to specific processes within the meaning of the term "to be further refined or improved in quality." These inquiries were answered on the basis that specific processes would have to be interpreted not only in terms of the meaning of the phrase "to be further refined or improved in quality", but also in terms of the quality of the raw material to be so processed.

Obviously, these questions were leading to a fundamental consideration of the wording of the definitions in the light of the intent of sugar quota legislation.

To focus attention on these problems and to introduce information that might shed light on developments and trends in the sugar industry, an article pertaining to changes in quality of crystalline raw sugar was published in Sugar Reports No. 25, May 1954. In general, the data in that article show that the quality of such sugar has been gradually improving during the approximately 50-year period covered by the study. Although it was not possible to attribute the improvement to specific factors, it was pointed out that technological and economic factors in all segments of the industry have contributed to the change. The changes that are constantly taking place in the sugar industry and the dynamics of the technology

of raw sugar production are factors that are related to the subjects and issues involved in this hearing.

Liquid sugar

Although liquid sugar, a relatively new development when sugar quota legislation was first enacted, was included in the quota system, it was not afforded the same treatment accorded to crystalline sugar. As a result of the difference in treatment, uncertainty as to the quota classification of liquid sugar from domestic areas arose. Both the uncertainty of the quota status of liquid sugar and the urgency of the problem increased as the marketing of liquid sugar increased in the United States.

At various times since sugar quota legislation has been in effect, questions have been raised with respect to the quota status of liquid sugar brought into the continental United States from Puerto Rico. Originally, such questions were dealt with on the basis of the principle applied to the classification of crystalline sugar. However, in view of the then existing definition of direct-consumption sugar, which limited direct-consumption classification to crystalline sugar, a question was raised as to whether liquid sugar could actually be classified as direct-consumption sugar under the provisions of the Sugar Act.

Consequently, it was decided that this problem along with the others with regard to definitions should be discussed publicly with the sugar industry with the objective in mind of obtaining industry suggestions for resolving these problems. Accordingly, a conference of industry representatives was held in Washington on September 15, 1954.

At that conference, the industry was unprepared to take positive action toward resolution of the problems. An industry task force was commissioned to consider the problems and to report its considerations. The report that was submitted to the Department in April 1955 contained divergent views and was disclaimed by several of its members.

As a result of these various developments, it was decided that the Department would present these problems to Congress to obtain legislative action which would clarify definitions so that their wording would be consistent with their intent and to furnish guidance to the Secretary in administering those provisions of the Act dependent upon definitions. Congress responded by amending

the definitions of raw and direct-consumption sugars and by giving the Secretary specific authority to deal with related problems when the Sugar Act was amended and extended this year.

The revised definitions resolve the problem of the classification for quota purposes of liquid sugar from domestic areas. Such classification is based on the principle applied to crystalline sugar and determinations which are made with respect to crystalline sugars must be applicable also to liquid sugars.

The principle established by the definitions of raw and direct-consumption sugars is logical and fundamentally sound. That principle has been supplemented by a new provision of the Act, section 101 (n).

Information and data which are relevant to the subjects and issues of this hearing were published in Sugar Reports No. 49, May 1956, under the title "New Provisions of the Sugar Act With Respect to Definitions, Refining Processes, and Qualities of Raw and Direct-Consumption Sugars."

Refining Processes and Qualities of Sugars

Section 101 (n) of the Sugar Act of 1948, as amended, is as follows:

"(n) The term 'to be further refined or improved in quality' means to be subjected substantially to the processes of (1) affination or defecation, (2) clarification, and (3) further purification by adsorption or crystallization. The Secretary is authorized, after such hearing and upon such notice as he may by regulations prescribe, to determine whether specific processes to which sugars are subjected are sufficient to meet the requirements of this paragraph (n) and whether sugars of specific qualities are raw sugar within the meaning of paragraph (d) of this section, or direct-consumption sugar within the meaning of paragraph (e) of this section."

That section refers also to sections 101 (d) and (e) of the Act, which are as follows:

"(d) The term 'raw sugar' means any sugars (exclusive of liquid sugar from foreign countries having liquid sugar quotas), whether or not principally of crystalline structure,

which are to be further refined or improved in quality to produce any sugars principally of crystalline structure or liquid sugar."

"(e) The term 'direct-consumption sugar' means any sugars principally of crystalline structure and any liquid sugar (exclusive of liquid sugar from foreign countries having liquid sugar quotas), which are not to be further refined or improved in quality."

The definition of the term "to be further refined or improved in quality" in paragraph 101 (n) refers to certain general processes. Another part of that section authorizes the Secretary to determine whether specific processes to which sugars are subjected meet the requirements of that definition and other provisions of that paragraph. A brief description of the general processes which are outlined therein follows:

- (a) Affination. Affination is the process of removing molasses and other surface impurities from raw sugars principally of crystalline structure.
- (b) Defecation. Defecation is the process of treating aqueous solutions of crystalline raw sugar, raw liquid sugar, or raw sugar washings with defecating agents and heat to precipitate and coagulate dissolved and suspended non-sugars preparatory to clarification.
- (c) Clarification. Clarification is the process of separating suspended, coagulated, and precipitated impurities from aqueous solutions of crystalline raw sugar, raw liquid sugar, or raw sugar washings.
- (d) Adsorption. Adsorption is the process of further purifying aqueous solutions of crystalline raw sugar, raw liquid sugar, or raw sugar washings by treating such products with adsorbents to remove dissolved non-sugars.
- (e) Crystallization. Crystallization is the process of further purifying sugars by crystallizing them from aqueous solutions of sugars and non-sugars.

Specific processes which may be classified under these types vary considerably in detail, but are essentially the same in principle. The variations arise from the method of refining employed, the type (crystalline or liquid) of raw material used, and the type of product produced.

Refining methods currently employed in the United States may be classified under three types: (1) bone char refining, (2) activated carbon refining, and (3) ion-exchange refining. At the present time, ion-exchange refining is actually supplemental to the other types of refining rather than a completely separate type. Some refineries use a combination of two or more of these types.

A typical bone char process includes affination (for crystalline sugars), defecation, clarification, adsorption, and crystallization. Activated carbon processes are essentially the same as the bone char processes, except that activated carbon rather than bone char is used as an adsorbent. Processes based on ion-exchange, although fundamentally equivalent to the other refining methods, show greater variation in the specific processes used in conjunction with ion-exchange.

Specific affination processes do not vary in any of the types of refining methods. Both the equipment and the procedures used are essentially the same regardless of differences that may exist in other parts of the refining processes.

There are many variations in specific defecation and clarification processes. These variations include differences in defecants used, equipment required, and the processes themselves. In some cases, defecation and clarification may be carried out simultaneously.

Variations in adsorption processes exist both as to the adsorbent used and the method of use. Adsorbents commonly used are bone char, activated carbon, and ion-exchange materials or a combination of those adsorbents. They may be employed in fixed beds or in conjunction with filters. In some cases, adsorption may be employed concurrently with defecation and clarification.

Crystallization processes are essentially the same for all types of refining methods.

Grouping of processes in refining definition.

Because of the current refining practices, it has been necessary

to group some of the refining processes on an alternative basis. Part one of the definition so groups two widely differing processes, affination and defecation. This alternative grouping is deemed logical since some refineries do not subject crystalline raw sugars to the affination process and, more importantly, the process cannot be used on liquid sugars.

Similarly, adsorption and crystallization processes are grouped alternatively. Just as the starting raw material (crystalline or non-crystalline) is a consideration in the alternative grouping of affination and defecation, the finished product (crystalline or non-crystalline) is a consideration for such grouping of adsorption and crystallization. Some refined liquid sugars are produced by concentrating refined sugar liquors to the proper concentration and composition for marketing. In this case, crystallization or adsorption, depending on the product, may be looked upon as the final purification step.

Quality of raw and direct-consumption sugars.

Another provision of subsection 101 (n) relates to the application of quality factors to supplement the principle established in subsections 101 (d) and (e) for distinguishing raw from direct-consumption sugar. The use of quality factors for this purpose requires that a satisfactory quality factor, or factors, be selected and that procedures for measuring and applying the factor to specific quantities of sugar be developed.

The ideal factor would be one that satisfactorily evaluates all sugars by means of an accurate, rapid, simple, and inexpensive test and that could be expressed by a mathematical relationship to permit comparison of all sugars on the same basis. It is doubtful that such an ideal factor exists. However, there are several factors that can be considered for use in this connection.

Refiners use several criteria for evaluating raw sugar, but the purpose of the evaluation is quite different from that required under the provisions of subsection 101 (n). However, some of the chemical and physical tests used in connection with commerce and in sugar production control may be satisfactory for this purpose.

Evaluation of sugar quality by various tests.

The tests most commonly applied to sugar are tests that determine: (1) sucrose content (by direct or double polarization or

chemically), (2) invert or reducing sugar content, (3) total sugar content, (4) ash content, (5) color, (6) organic non-sugar content, (7) moisture content, or (8) total solids content. It will be desirable to have testimony, therefore, as to whether any one or some combination of these tests would be a satisfactory solution of the problem for all sugars under all conditions.

The quality of sugar may be expressed in one of two ways: (1) purity (the ratio of the amount of sugar contained to the total solids contained) or (2) an expression of the amount of non-sugars contained. The quality factors referred to in the preceding paragraph are generally used to indicate sugar quality on either basis.

The test most commonly applied to all types of sugar products is direct polarization. The direct polariscopic test, as applied to sugar, is designed not to measure quality, but to measure the percentage of sucrose content. However, in the case of crystalline sugars which contain very small amounts of water and invert sugar, the polariscopic test is an indication of quality inasmuch as it indirectly measures the amount of impurities.

For those sugars, including liquid sugar, which contain significant quantities of water or invert sugars, the polariscopic test alone is not a satisfactory test. However, the direct polariscopic test is frequently corrected for moisture content to yield direct polarization on a dry basis. A determination of total sugar content and total soluble solids content yields information about the quality of such sugars that is approximately comparable to a direct polariscopic test for sugars that are essentially sucrose. However, the total sugar content test treats invert sugar as sugar, whereas the polariscopic test treats it as an impurity. Also, a total sugar content determination as a percentage of total soluble solids content eliminates water in the determination, whereas it is not eliminated by the polariscopic test.

Measurement of non-sugars is not usually a trade practice in the type of transaction under consideration here. Occasionally, limits on one or more non-sugars may be included in a special contract, but these are specified in addition to the usual criterion, polarization. Consequently, use of non-sugar measurement as a quality factor would add a step to current practices. Nevertheless, non-sugars as quality factors do warrant discussion.

The non-sugars (other than water) that are usually measured directly are total ash (mineral content) or some individual constituent of ash. Ash measurement indicates a real quantity of an

impurity. Color, although measured directly, is only an indirect indication of an impurity because it is not related to a specific quantity of an impurity. Organic non-sugars are not actually measured, but are assumed by subtracting the total of the measured constituents (total sugars, ash, and moisture) from the total product.

Crystalline sugar compared with liquid sugar

As indicated in the discussion of the polariscopic test, there are problems associated with a comparison of the quality of crystalline and liquid sugars. In refined granulated and sucrose type liquid sugars, invert sugar is an impurity, whereas in invert type liquid sugars and invert mush, it is a desired constituent. In liquid sugar, the water content also must be taken into consideration. Although it is a practical matter to determine the purity or total sugar content percent of total solids content with respect to liquid sugar, a similar test on crystalline sugar is not deemed necessary. Water in the amounts normally contained in crystalline sugars does not seriously affect determinations of non-sugar constituents, but that contained in liquid sugar is sufficient to affect results. Consequently, it can be seen that the small amount of water contained in crystalline sugar and the large amount of water contained in liquid sugar create problems in comparing the quality of the two sugars.

Brown or soft sugars

Brown or soft sugars which are fully refined products present a problem to a limited extent. The factors that may be applied to raw and direct-consumption sugars for the evaluation of quality do not have the same significance when applied to brown, or soft sugar. Although the amount of non-sugars contained in a specific sugar is generally an evaluation of its quality, and the extent to which non-sugars have been removed from raw sugar is an evaluation of refining processes, such criteria do not hold for brown, or soft sugars.

Availability of information on quality factors

One of the problems involved in using quality factors to supplement the **use** criterion to distinguish raw sugar from direct-consumption sugar is the availability of data to establish an adequate standard.

Polarization data for raw crystalline sugars are available in considerable volume both from published reports and from administrative reports collected by the Sugar Division. Similar data for direct-consumption sugars are available in limited amounts. Data for direct-consumption sugars that are available from reports submitted to the Sugar Division are subject to certain limitations. Many direct-consumption sugar entries are reported as testing 100 degrees, but an actual polariscopic test is not made. The extent of this practice is not known with certainty, and, consequently, such uncertainty must be taken into consideration where direct-consumption sugar polarization data are analyzed and evaluated.

Published data with respect to other factors such as ash, color, and organic non-sugars are available to a much lesser extent than polarization data. Although such factors are usually determined by producers of raw sugar and by refiners, the data are not generally published. The limited amount of published data that is available is generally not of recent origin. Furthermore, the quantity units on which data with respect to such factors and with respect to polarization are based differ. The lack of such published information on a comparable basis makes it difficult to evaluate its use for this purpose.

So far as liquid sugar is concerned, there is no published information with regard to quality factors of the raw product, except for data on total sugar content reported to the Sugar Division. This lack of information on liquid sugar is unfortunate, inasmuch as the equating of liquid sugar quality to that of crystalline sugar is an important part of the new provisions of the Act.

Application of Quality Factors

Regardless of which quality factor may be selected to supplement the use criterion to distinguish raw sugar from direct-consumption sugar, the application of such factors to specific lots of sugar presents some problems. In general, application of the factors requires that the following points be taken into consideration: (1) unit to which the factor is applied, (2) sampling of the unit, (3) testing, and (4) reporting the results. Each of these presents certain problems which must necessarily be clarified for efficient and effective administration.

Trade practices

In view of the fact that any new practices that are introduced

into the customary trade transactions for sugar are likely to increase administrative requirements as well as expenses for the entire industry, it is desirable to the extent practicable to utilize commercial trade practices for the application of quality criteria to specific lots of sugars. For that purpose, it would be necessary to establish whether such practices are sufficiently well defined for use in this connection. Consideration should be given to the question of whether trade practices are consistent throughout the industry. Differences are likely to arise not only because of the peculiarities of the different ports of entry, but also because of the parties involved in transactions as well as factors stemming from the area of origin of the sugar involved. So far as it is presently known, these various practices are not described in an official, semi-official, or general publication of any governmental agency or trade group. It may be possible for the industry to agree upon and describe uniform trade practices for the application of quality criteria to specific lots of sugar.

Practices of the Customs Bureau

The Customs Bureau, through the issuance of rules, regulations, circular letters, and other official documents, has established specific sampling, testing, and reporting techniques that could be adapted to the purposes for which the Secretary of Agriculture might require such techniques.

For instance, in Circular Letter No. 2416, issued by the Customs Bureau on July 14, 1943, the Bureau adopted Official Sampling Method No. 17 which describes the procedures for sampling specific lots of sugar and the mixing of such samples for testing. An analytical study of this method by E. F. Kenney, Customs Laboratory, U.S. Department of the Treasury, and the results were published under the title "Raw Sugar Sampling, Mixing and Testing" in Industrial and Engineering Chemistry, Vol. 18, p. 684 (1946).

Procedures to be followed by the Customs Bureau in performing various sugar tests (among which are tests referred to previously in this testimony) are described in "U. S. Customs Laboratory Methods." Some of those same procedures and others as well are published in a handbook by The Association of Official Agriculture Chemists. It may be possible that the methods and procedures contained in those two sources could serve as a reference point to which the methods and procedures used in trade practice could be related.

Summary

This brief has presented information and data relating to the processes enumerated in the definition of the term "to be further refined or improved in quality" as contained in section 101 (n) of the Act. Further, data pertinent to the specific qualities of sugars, sampling of sugars for testing, methods of testing for the measurement of specific qualities, and reporting results of such tests have been presented--primarily in the exhibit--as a basis for consideration for all interested persons.

ADMINISTRATIVE ACTIONS

<u>Date announced</u>	<u>Administrative action</u>
June 29, 1956	Announcement of public hearings to receive evidence pertinent to allotments to processors of increases in 1956 quotas provided for by recent amendment of the Sugar Act. The hearing on allotment of mainland cane sugar quota is scheduled at 9:30 a.m., (EDT), and on the domestic beet sugar quota at 10:30 a.m., July 16, 1956, in Room 2-W, Administration Building, U.S. Department of Agriculture, Washington, D. C.
June 29, 1956	Announcement of public hearings to receive information and recommendations on establishing farm proportionate shares (acreage allotments) for the 1957 sugarcane crop in Louisiana and Florida pursuant to the Sugar Act of 1948, as amended. The hearing is scheduled at 10:00 a.m., (CST), July 19, 1956, in the International House, 607 Gravier Street, New Orleans, Louisiana.
July 9, 1956	Announcement of hearing pertaining to new definitions with respect to the distinction between raw and direct-consumption sugar as provided for in the Sugar Act of 1948, as amended by

ADMINISTRATIVE ACTIONS (Ctd)

<u>Date announced</u>	<u>Administrative action</u>
July 9, 1956 (ctd)	Public Law 545, 84th Congress. The hearing will begin at 10:00 a.m. (EDT), July 30, 1956, in Room 218, Administration Building, U.S. Department of Agriculture, Washington, D. C.
July 10, 1956	Determination of fair and reasonable prices for the 1956 crop of sugar beets at not less than those provided in the 1956 crop sugar beet purchase contracts.
July 10, 1956	Determination of fair and reasonable wage rates for production, cultivation, and harvesting of sugarcane workers in Florida between July 1, 1956, and June 30, 1957. The rates provided are 5 cents per hour higher than last year.
July 10, 1956	Determination of fair and reasonable prices for sugarcane and rates for processing sugarcane under toll agreements for the 1956 crop of Hawaiian sugarcane. Purchase-type agreements have been used in the past, but the general use of tolling agreements is new with this crop.
July 13, 1956	Allotment to processors of 500,000 tons of the 1956 sugar quota for the mainland cane sugar area replacing the preliminary allotment announced December 19, 1955.
July 17, 1956	Announcement of public hearing to receive testimony pertaining to (1) reasonable wage rates for workers in Louisiana employed in harvesting the 1956 crop of sugarcane and in production and cultivation of sugarcane during 1957 and (2) fair prices for the 1956 crop of sugarcane. The hearing will begin at 10:00 a.m. (CST), August 2, 1956, in the High School Gymnasium, Thibodaux, Louisiana.

STATISTICAL SERIES IN THIS ISSUEHIGHLIGHTS

1. Final data on May 1956 deliveries of sugar for United States consumption, 720,000 tons, raw value; the previously published preliminary total for that month was 699,000 tons. June deliveries of sugar, 771,000 tons (preliminary) up 7.1 percent from May 1956, but down 6.0 percent from June 1955.
2. Primary distributors' stocks June 30, 1956, 1,471,000 tons (preliminary), down 117,000 tons from a month ago, but up 141,000 tons from a year ago. During June, refiners' stocks remained about unchanged; beet processors' stocks declined 101,000 tons, and importers and mainland sugarcane processors' stocks, 9,000 and 7,000 tons, respectively. As compared with a year ago, combined stocks of refiners and mainland sugarcane processors up 169,000 tons; beet processors' stocks about unchanged, and importers' stocks down about 28,000 tons.
3. Charges to quotas January through June, 4,631,000 tons, 384,000 tons or 9 percent larger than during the same period of 1955. Increases in charges to quotas were: Cuba, 248,000 tons; Hawaii and the Philippines, 86,000 tons and 72,000 tons, respectively; Puerto Rico, 43,000 tons; and mainland cane area, 30,000 tons. Decreases in charges to quotas were: Domestic beet area, 82,000 tons; "full duty" countries, 14,000 tons.
4. Deliveries of sugar during May to the Middle Atlantic, Western, and Southern regions were 1 to 7 percent higher than a year earlier and about 2 percent smaller to the New England and North Central regions. They were about 15 percent higher to the Southern region than in April 1956; about the same in the Western region, but 5 to 6 percent lower in the other 3 regions.

Table 1.-Distribution of sugar by primary distributors in the continental United States, Puerto Rico, and Hawaii during January-May 1956

	1956 (Short tons, raw value)	1955 (Short tons, raw value)
<u>Continental United States</u>		
Refiners' raw	17,432	395
Refiners' refined	2,436,482	2,194,833
Beet processors' refined	668,130	678,986
Importers' direct consumption	301,392	256,334
Mainland sugarcane processors' direct-consumption	66,889 1/	35,321
Total	3,490,325	3,165,869
Deliveries for export, livestock feed, etc.	112,774 2/	21,822
For continental consumption 3/	3,377,551	3,144,047
<u>Puerto Rico</u>	42,025	34,764
<u>Hawaii</u>	22,671	16,472

1/ Deliveries for direct-consumption by mainland sugarcane processors that acquire no raw sugar from others for refining; deliveries by mainland sugarcane processor-refiners are included in deliveries by refiners.

2/ Deliveries to Commodity Credit Corporation for export 84,499; other exports, 18,982; livestock feed, 9,293.

3/ Includes deliveries for United States Military forces at home and abroad.

Table 2.-Stocks of sugar held by primary distributors in the continental United States, May 31, 1956 and 1955

	1956 (Short tons, raw value)	1955 (Short tons, raw value)
Refiners' raw	327,254	317,487
Refiners' refined	332,257	287,054
Beet processors' refined	809,789	867,340
Importers' direct consumption	65,893	87,933
Mainland sugarcane processors	51,991*	52,208
Total	1,587,184	1,612,022

* Stocks of sugar of mainland sugarcane processors that acquire no raw sugar from others for refining; processor-refiner stocks are included in refiners' stocks.

Table 3.-Raw sugar: Refiners' stocks, receipts, meltings and deliveries, January-May 1956 1/

	(Short tons, raw value)
Stocks, January 1, 1956	256,092
Receipts	2,605,728
Meltings	2,516,669
Deliveries for direct consumption	2,063
Deliveries for export and livestock feed	15,369
Gains and (losses), adjustments, etc.	(465)
Stocks, May 31, 1956	327,254

1/ For receipts by source of supply, see Table 8.

Source: Compiled from reports on Form SU-73 and 74.

Table 4. -Refined sugar: Refiners' and beet processors' stocks, production and deliveries, January-May 1956

	Cane sugar (short tons, raw value)	Beet sugar
Stocks, January 1, 1956	268,649	1,299,794
Production from raws melted	2,496,878	-
Production direct from cane or beets	-	178,127
Imported refined receipts	6,901	-
Deliveries for continental consumption	2,418,446*	642,111
Deliveries for export and livestock feed	18,036	26,019
Gains and (losses), adjustments, etc.	(3,689)	(2)
Stocks, May 31, 1956	332,257	809,789

* Includes 5,299 tons of imported refined sugar

Source: Compiled from reports on Forms SU-73, SU-74 and SU-70 from cane sugar refiners and beet sugar processors, respectively.

Table 5. -Direct-consumption sugar: Importers' stocks, receipts and deliveries, January-May 1956 1/

	(short tons, raw value)
Stocks, January 1, 1956	19,235
Receipts	348,178
Deliveries for continental consumption	291,714 <u>2/</u>
Deliveries for export and livestock feed	9,678
Gains and (losses), adjustments, etc.	(128)
Stocks, May 31, 1956	65,893

1/ For receipt by source of supply, see Table 8.

2/ Does not include 5,299 tons imported refined sugar delivered by refiners for direct-consumption.

Source: Compiled from reports on Form SU-75 from importers of direct-consumption sugar.

Table 6. -Mainland sugarcane processors: Stocks, production and deliveries of mainland cane sugar, January-May 1956

	(short tons, raw value)
Stocks, January 1, 1956	166,715
Production	76,168
Deliveries:	
For further processing	123,639
For direct consumption	23,217
For export and livestock feed	43,672
Total	190,528
Gains and (losses), adjustments, etc.	(364)
Stocks, May 31, 1956	51,991

Source: Compiled from reports submitted by mainland sugarcane processors.

Table 7.-Mainland sugar: Production and allotment charges,
May 31, 1956

	<u>Cane sugar</u> (short tons, raw value)	<u>Beet sugar</u> (raw value)
Production	80,149	178,127
<u>Allotment charges</u>		
Louisiana sugarcane processors		
For further processing	131,643	
For direct-consumption	17,018	
Louisiana processor refiners	69,242	
Florida sugarcane processors	94,895	
Beet processors		642,061
Total	312,798	642,061

Source: Compiled from reports submitted by mainland sugarcane processors, processor refiners and beet processors on Forms SU-71, 72, 73 and SU-70.

Table 8.-Refiners and importers: Receipts by source of supply
January-May 31, 1956

<u>Source of supply</u>	<u>Refiners</u> (raw sugar) (short tons, raw value)	<u>Importers</u> (DC sugar)
Cuba	1,225,066	236,550
Hawaii	308,607	
Hawaii, refined	6,901*	
Mainland cane area	129,797	
Philippines, Republic of the	513,056	3,335
Puerto Rico	421,226	67,017
Virgin Islands	4,268	
Other countries	2,862	41,276
Not identifiable	846	
Total	2,612,629	348,178
Total raw sugar	2,605,728	

*Refined sugar imported by refiners.

Table 9. -Distribution of sugar by primary distributors in the continental United States, June and January-June, 1956 and 1955

	1956 1/		1955	
	June	Jan.-June (short tons, raw value)	June	Jan.-June
Refiners	555,202	3,009,116	543,688	2,738,916
Beet processors	155,950	824,080	202,211	881,197
Importers	58,260	359,652	74,565	330,899
Mainland sugarcane processors	1,740 2/	68,629	2,561	37,882
Total	771,152	4,261,477	823,025	3,988,894
Deliveries for export, livestock feed, etc.		112,774	2,751	24,573
For continental consumption 3/	771,152	4,148,703	820,274	3,964,321

1/ Preliminary

2/ Estimated same as June 1955 for those processors included in 1956.

3/ Includes deliveries for U. S. military forces at home and abroad.

Table 10.-Stocks of sugar held by primary distributors in the continental United States, June 30, 1956 and June 30, 1955

	1956 1/	1955
Refiners' raw	351,839	256,362
Refiners' refined	308,051	233,188
Beet processors	708,768	709,088
Importers	56,909	84,925
Mainland sugarcane processors	45,000 2/	45,885
Total	1,470,567	1,329,448

1/ Preliminary

2/ Not available; estimated

Table 11.-Status of 1956 Sugar Quotas as of June 30, 1956 1/

Areas	Quota	Credit for draw- back of duty	Charge to quota & offset to draw- back of duty 2/		Total	Unfilled balance
			Direct consump- tion from offshore areas 3/	Total		Within direct consump- tion limits for offshore areas
Short tons, raw value						
Domestic beet	1,863,731		798,011 4/		1,065,720	
Mainland cane	560,019		334,538 4/		225,481	
Hawaii	1,052,000		463,965	6,990	588,035	22,626
Puerto Rico	1,080,000		585,439	93,415	494,561	32,618
Virgin Islands	12,000		6,284		5,716	
Republic of the Philippines	980,000		655,598	4,121	324,402	55,799
Cuba	2,906,160	1,209	1,740,047	273,823	1,167,322	101,205
Other foreign countries	121,090	358	47,052	41,341	74,396	(170)
Total	8,575,000	1,567	4,630,934	419,690	3,945,633	212,078

Details of other foreign countries

Dominican Republic	33,877	123	13,161	13,161	20,839	)	
El Salvador	4,141	0	0	0	4,141	)	
Haiti	3,278	5	2,852	0	431	)	
Mexico	14,046	29	12,056	12,056	2,019	)	
Nicaragua	7,823	0	2,340	2,340	5,483	)	(170) 8/
Peru	51,871	201	10,791	7,932	41,281	)	
Unspecified 5/	6,054	0	5,852 6/	5,852	202 7/	)	
Total	121,090	358	47,052 9/	41,341	74,396		

LIQUID SUGAR 10/

(wine gallons of 72 percent total sugar content)

Cuba	7,970,558	6,933,773	1,036,785
Dominican Republic	830,894	0	830,894
British West Indies	300,000	0	300,000

1/ Excludes January-June entries of ex-quota sugar for reexport 18,473 short tons, raw value, and for livestock feed, 13,037 short tons; total, 31,510.

2/ These data include the following: (a) Domestic beet and mainland cane sugar marketed through June 30, 1956; (b) raw sugar from Hawaii and all sugar from the Republic of the Philippines and Cuba entered through June 30, 1956 as shown by quota clearance papers received in the Sugar Division by July 13, 1956; and (c) direct-consumption sugar from Hawaii, and all sugar from Puerto Rico, the Virgin Islands and "other foreign countries" entered or certified for entry as of June 30, 1956.

3/ Includes raw sugar for direct-consumption: Cuba, 11,253; Puerto Rico, 71; Hawaii, 104; and the Republic of the Philippines, 95; total, 11,523.

4/ Estimated in part. 5/ Countries without individual prorations. 6/ Belgium, 243; Canada, 1,055; China (Formosa), 1,165; Colombia, 1,154; Costa Rica, 1,089; Denmark, 31; Hong Kong, 15; Netherlands, 1,100; total, 5,852. 7/ Applications being held pending availability of quota comprise: Belgium, 221; Colombia, 1,261; China, (Formosa) 901; Netherlands, 3,421; total, 5,804. 8/ Nicaragua and Hong Kong sugar was entered in excess of direct-consumption limitations, under provisions of Section 207(h) of the Sugar Act of 1948, as amended. 9/ Charges to quotas exclude the first 10 tons entered by each country (except Canada, which entered 20 tons) under Section 212. The Federal of Germany, Panama, the United Kingdom, and Venezuela also entered 10 tons each under Section 212. 10/ Charges to quotas exclude 16,204 gallons by United Kingdom, 600 gallons by Australia and 500 gallons by Canada entered under Section 212.

Table 12.-Comparison of charges to quotas and offsets to drawback of duty
January-June 1956 and 1955

(short tons, raw value and percentages)

Area	1956	1955	Increase		Decrease	
	Tons	Tons	Tons	Percent	Tons	Percent
Domestic beet	798,011	880,473 ^{2/}			82,462	9.37
Mainland cane	334,538 ^{1/}	304,855 ^{2/}	29,683	9.74		
Hawaii	463,965	378,313	85,652	22.64		
Puerto Rico	585,439	541,992	43,447	8.02		
Virgin Islands	6,284	4,004	2,280	56.94		
Republic of the Philippines	655,598	583,289	72,309	12.40		
Cuba	1,740,047	1,492,463	247,584	16.59		
Other foreign countries	47,052	61,421			14,369	23.39
Total	4,630,934	4,246,810	384,124	9.04		

Details of other foreign countries

Dominican Republic	13,161	24,794			11,633	46.92
El Salvador	0	0				
Haiti	2,852	0	2,852			
Mexico	12,056	11,334	722	6.37		
Nicaragua	2,340	7,815			5,475	70.06
Peru	10,791	11,920			1,129	9.47
Unspecified ^{3/}	5,852	5,558	294	5.29		
Total	47,052	61,421			14,369	23.39

LIQUID SUGAR

(wine gallons of 72 percent total sugar content)

Cuba	6,933,773	7,691,779	758,006	9.9
Dominican Republic	0	4,127		
British West Indies	0	0		

^{1/} June portion estimated.^{2/} Revised.^{3/} Countries without individual prorations.

Table 13.-Status of 1956 Sugar Quotas as of July 13, 1956 ^{1/}

Areas	Quota	Credit for draw- back of duty	Charge to quota & offset to draw- back of duty 2/		Total	Unfilled balance
			Total	Direct consump- tion from offshore areas 3/		Within dir- ect consump- tion limits for offshore areas
Short tons, raw value						
Domestic beet	1,863,731		878,011 4/		985,720	
Mainland cane	560,019		340,538 4/		219,481	
Hawaii	1,052,000		483,785	8,186	568,215	21,430
Puerto Rico	1,080,000		646,630	96,995	433,370	29,038
Virgin Islands	12,000		6,262		5,738	
Republic of the Philippines	980,000		683,007	4,146	296,993	55,774
Cuba	2,906,160	1,209	1,790,892	291,221	1,116,477	83,807
Other foreign countries	121,090	358	47,028	41,317	74,420	(146)
Total	8,575,000	1,567	4,876,153	441,865	3,700,414	189,903
Details of other foreign countries						
Dominican						
Republic	33,877	123	13,148	13,148	20,852	)
El Salvador	4,141	0	0	0	4,141	)
Haiti	3,278	5	2,852	0	431	)
Mexico	14,046	29	12,056	12,056	2,019	)
Nicaragua	7,823	0	2,340	2,340	5,483	) (146) 8/
Peru	51,871	201	10,791	7,932	41,281	)
Unspecified 5/	6,054	0	5,841 6/	5,841	213 7/	)
Total	121,090	358	47,028 9/	41,317	74,420	

LIQUID SUGAR ^{10/}

(wine gallons of 72 percent total sugar content)

Cuba	7,970,558	7,387,233	583,325
Dominican Republic	830,894	0	830,894
British West Indies	300,000	0	300,000

^{1/} Excludes January 1-July 13 entries of ex-quota sugar for reexport 21,986 short tons, raw value, and for livestock feed, 12,291 short tons; total, 34,277. ^{2/} These data include the following: (a) Domestic beet and mainland cane sugar marketed through July 13, 1956; (b) raw sugar from Hawaii and all sugar from the Republic of the Philippines and Cuba entered through July 13, 1956 as shown by quota clearance papers received in the Sugar Division by July 13, 1956; and (c) direct-consumption sugar from Hawaii and all sugar from Puerto Rico, the Virgin Islands and "other foreign countries" entered or certified for entry as of July 13, 1956. ^{3/} Includes raw sugar for direct-consumption: Cuba, 16,329; Puerto Rico, 71; Hawaii, 104; and the Republic of the Philippines, 120; total, 16,624. ^{4/} Estimated in part. ^{5/} Countries without individual proratations. ^{6/} Belgium, 243; Canada, 1,055; China (Formosa), 1,165; Colombia, 1,154; Costa Rica, 1,078; Denmark, 31; Hong Kong, 15; Netherlands, 1,100; total, 5,841. ^{7/} Applications being held pending availability of quota comprise: Belgium, 221; Colombia, 1,261; China, (Formosa), 901; Netherlands, 3,421; total, 5,804. ^{8/} Nicaragua and Hong Kong sugar was entered in excess of direct-consumption limitations, under provisions of Section 207(h) of the Sugar Act of 1948, as amended. ^{9/} Charges to quotas exclude the first 10 tons entered by each country (except Canada, which entered 20 tons) under Section 212. The Federal Republic of Germany, Panama, the United Kingdom and Venezuela also entered 10 tons each under Section 212. ^{10/} Charges to quotas exclude 16,204 gallons by United Kingdom, 600 gallons by Australia and 500 gallons by Canada entered under Section 212.

Table 14.-Deliveries of Sugar by Primary Distributors by States May 1956

State	Cane sugar refiners	Beet sugar processors	Importers of direct- consumption sugar	Mainland cane sugar mills	Total
100-pound bags, refined equivalent					
NEW ENGLAND					
CONN	85174		5500		90674
ME	47608		1015		48623
MASS	380193		24485		04678
NH	24501		700		25201
RI	43343		4610		47953
VT	13446		6000		19446
TOTAL	594265		42310		636575
MID ATLANTIC					
NJ	546078		95827		641905
NY	1226842		140892		1367734
PENN	774296		231652	5	1005953
TOTAL	2547216		468371	5	3015592
N CENTRAL					
ILL	712129	479674		4679	1196482
IND	296532	16015	5777	7	318331
IOWA	42776	104167	1560		148503
KAN	60377	69724			130101
MICH	294179	198810	57441		550430
MINN	25479	91503		2000	118982
MO	218918	65223	7565	981	292687
NEBR	29606	85222		600	115428
N DAK	308	27073			27381
OHIO	594457	24694	33360		652511
S DAK	3204	25020			28224
WISC	98157	105301	4400	2000	209858
TOTAL	2376122	1292426	110103	10267	3788918
SOUTHERN					
ALA	231140				231140
ARK	136371	2916			139287
DEL	12290		400		12690
DC	43605		6200		49805
FLA	104342		139822	6797	250961
GA	364119		84905		449024
KY	197849		11813		209662
LA	345076		8	3943	349027
MD	272549		68940		341489
MISS	209288			671	209959
NC	239288		136334		375622
OKLA	117316	29898			147214
SC	178484		24803		203287
TENN	359580		3230		362810
TEXAS	567148	67725	82383	1	717257
VA	171770		74029	3	245802
WVA	71782		9260		81042
TOTAL	3621997	100539	642127	11415	4376078
WESTERN					
ARIZ	25656	15456			41112
CALI	483493	640350	11000		1134843
COLO	8050	78688			86738
IDAHO	3012	21561			24573
MONT	1333	26352			27685
NEV	3105	2040			5145
N MEX	7817	16258			24075
ORE	45998	110234			156232
UTAH	5402	43007			48409
WASH	49384	88887	4520		142791
WYO	605	9431			10036
TOTAL	633855	1052264	15520		1701639
GRAND TOTAL	9773455	2445229	1278431	21687	13518802

Table 15.-Sugar: Prices, production, and stocks

Period	Prices (Gross) 1/					
	Raw cane		Refined cane, quoted wholesale			
	M.Y. duty paid	World fas, Cuba	New York	Gulf	Chicago-West	Pacific Coast
	Cents per pound					
1949-54 annual av.	6.07	4.28	8.40	8.35	8.36	8.41
1954 annual av.	6.09	3.26	8.72	8.55	8.56	8.50
1955 annual av.	5.95	3.24	8.59	8.50	8.49	8.53
1955						
July	6.01	3.22	8.55	8.50	8.50	8.50
August	6.02	3.22	8.55	8.47	8.44	8.50
September	6.00	3.27	8.55	8.45	8.40	8.50
October	6.06	3.28	8.63	8.50	8.49	8.52
November	5.97	3.19	8.65	8.55	8.50	8.65
December	5.83	3.16	8.65	8.55	8.50	8.65
1956						
January	5.88	3.26	8.65	8.55	8.50	8.65
February	5.88	3.28	8.65	8.55	8.50	8.65
March	5.95	3.34	8.65	8.55	8.50	8.65
April	6.02	3.31	8.66	8.55	8.55	8.68
May	6.03	3.36	8.75	8.55	8.60	8.75
June	6.00	3.36	8.75	8.55	8.60	8.75
12 month av.	5.97	3.27	8.64	8.53	8.51	8.62

Period	Prices (Gross) (continued) 1/			
	Refined beet, quoted wholesale			Refined, retail
	New York (Eastern)	Chicago-West	Pacific Coast	U.S. average
	Cents per pound			
1949-54 annual av.	8.22	8.16	8.31	10.13
1954 annual av.	8.50	8.35	8.40	10.52
1955 annual av.	8.39	8.29	8.43	10.42
1955				
July	8.35	8.30	8.40	10.38
August	8.35	8.24	8.40	10.38
September	8.35	8.20	8.40	10.40
October	8.43	8.29	8.42	10.40
November	8.45	8.30	8.55	10.46
December	8.45	8.30	8.55	10.48
1956				
January	8.45	8.30	8.55	10.50
February	8.45	8.30	8.55	10.48
March	8.45	8.30	8.55	10.48
April	8.46	8.35	8.58	10.52
May	8.55	8.40	8.65	10.52
June	8.55	8.40	8.65	
12 month av.	8.44	8.31	8.52	10.45 2/

Period	Production and month-end stocks, refined			
	Production		Month-end stocks	
	Cane sugar refiners	Beet processors	Cane sugar refiners	Beet processors
	1,000 short tons, raw value			
1949-54 monthly av.	480	144	248 3/	729 3/
1954 monthly av.	475	166	254 3/	810 3/
1955 monthly av.	502	150	236 3/	860 3/
1955				
July	522	36	214	505
August	604	49	212	348
September	584	118	214	301
October	563	466	209	651
November	467	521	204	1,069
December	506	323	233	1,300
1956				
January	493	86	289	1,254
February	441	18	288	1,145
March	492	16	295	1,015
April	530	21	309	904
May	541	37	332	810
June 4/	528	55	308	709
12 month av.	523	146	259	834

1/ Quoted wholesale refined prices represent the current quotations of cane refiners and beet processors even though orders sometimes are taken on a day to day basis at a lower price. 2/ 11 month average. 3/ Over-quota stocks at the end of the year included. 4/ Preliminary.

UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
WASHINGTON, D. C.

OFFICIAL BUSINESS

Penalty for private use to avoid
payment of postage \$300.